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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,240

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Fabio Pasolini

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EXAMINER

WEISKOPF, MARIE

ART UNIT

PAPER NUMBER

3664

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/789,240

Applicant(s)

PASOLINI ET AL.

Examiner

Marie A. Weiskopf

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-19 is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-3, 9-10, 21-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al (US 4,823,626) in view of An et al (US 6,463,347).

As per claims 1 and 20, Hartman discloses a first inertial sensor having a first preferential detection axis (Col. 3, lines 43-47); a converter coupled to the first inertial sensor and supplying a first signal correlated to forces acting on the first inertial sensor according to the first preferential detection axis (Col. 3, lines 32-36); a first processing stage structured to process the first signal and supply a second signal correlated to a dynamic component of the first signal (Col. 3, lines 59-64). Hartmann et al fails to disclose specifically a comparator supplying a pulse when the second signal exceeds a threshold, however, An et al discloses this. (Column 6, lines 22-65) It would have been obvious to one having ordinary skill in the art at the time of the invention to use a comparator to determine if the amount of the signal is enough and if so, supplying a pulse to the device.

As per claim 8, Hartmann further discloses a second inertial sensor having a second preferential detection axis that is transverse to the first preferential detection axis. (Col. 1, lines 44-57)

3. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over An et al as applied to claim 1 above, and further in view of Oguchi et al (US 2002/0033047).

Hartmann and An et al teach all the elements of claims 1, and further teaches a first preferential detection axis, a second preferential detection axis, and a third preferential detection axis being orthogonal to one another (col. 1, lines 44-57). Hartmann further teaches a first inertial sensor and second inertial sensor that are selectively connectable in sequence to a converter (col. 5, lines 20-27). Hartmann further discloses a switch device to selectively connect a first, second, and third inertial sensor in sequence to a converter (Fig. 1). Hartmann fails to disclose a micro-electro-mechanical sensor with capacitive unbalancing.

Oguchi in the same field of invention discloses a micro-electro-mechanical sensor with capacitive unbalancing (Fig. 2, paragraphs 41 and 42).

From this teaching of Oguchi, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify an inertial sensor arrangement of Hartmann to include a micro-electro-mechanical sensor with capacitive unbalancing as taught by Oguchi, in order to use a force sensor with a moveable portion that naturally returns to its original position and can continually operate without constant recalibration.

***Allowable Subject Matter***

4. Claims 2-3, 9-10, and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 11-19 are allowed.

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6. The following is a statement of reasons for the indication of allowable subject matter: the prior art, individually or in combination, fails to disclose, teach or suggest deactivation means connected to the user devices for setting the user devices in the second operative state and activation means for setting the device in the first operative state, the activation means including an inertial sensor.

***Response to Arguments***


7. Applicant's arguments with respect to claims 1, 4-8 and 20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

  
THOMAS BLACK  
SUPERVISORY PATENT EXAMINER

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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